

SOME PARASITES OF THE ORIENTAL PEACH MOTH IN NEW JERSEY

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In 1928 Stearns¹ published a list of parasites of the Oriental Peach Moth giving their distribution in the United States on that host. Of the thirty-nine primary larval parasites reported, twenty-eight were recorded from New Jersey. At the same time two primary pupal parasites and three secondary parasites of the Oriental Peach Moth were recorded from New Jersey.

During the summers of 1927 and 1928 the writer collected a large number of larvæ of the Oriental Peach Moth from twigs and fruit in the field. Collections of hibernacula of the peach moth were made also in the early spring of 1928. From these collections certain species of parasites were reared which are not recorded in the list published by Stearns.

In July and August of 1928 the writer exposed, in the large variety orchard at the college farm, pupæ that had been reared in the insectary from apples on which peach moth eggs in the black spot stage had been placed. After having been in the orchard one or more days the pupæ were vialled and records kept of any parasites that emerged. Two species not recorded in Stearns' list were obtained. These species, together with the species obtained from the collections mentioned, are given in table 1. The species were determined at the National Museum, Washington, D. C.

TABLE 1.—PARASITES OBTAINED FROM PEACH MOTH PUPÆ, SUMMER LARVÆ
AND HIBERNACULA COLLECTED FROM DIFFERENT LOCALITIES
IN NEW JERSEY IN 1927 AND 1928.

LARVAL PARASITES	PUPAL PARASITES
<i>Macrocentrus delicatus</i> Cress.	<i>Syntomosphyrum esurus</i> Riley.
<i>Macrocentrus</i> sp.?	<i>Miotropis clisiocampæ</i> Ashm.
<i>Eubadizon pleuralis</i> Cress.	
<i>Calliephialtes</i> n. sp.	SECONDARY PARASITES
<i>Lixophaga plumbea</i> Ald.	<i>Eurytoma</i> sp. near <i>tylodermatis</i>
<i>Lixophaga mediocris</i> Ald.	<i>Eupelmus amicus</i> Gir.
<i>Diocetes obliteratus</i> (Cress.)	

¹ Stearns, L. A. 1928. The Larval Parasites of the Oriental Peach Moth (*Laspeyresia molesta* Busek) with Special Reference to the Biology of *Macrocentrus ancylivora* Rohwer. N. J. Agr. Expt. Station Bull. 460.

Macrocentrus delicatus Cress. This species has been reared from larvæ collected at New Brunswick, Glen Moore, South River, Manasquan and Middletown. At New Brunswick, in 1928, the parasite was reared from larvæ collected in June, July, August and September. It was the most numerous parasite at that locality for that year.

Macrocentrus sp. This parasite which appears to be neither *M. delicatus* nor *M. ancylivora* is represented by one female specimen. It was reared from a larva collected at Moorestown on July 13, 1928.

- *Eubadizon pleuralis* Cress. One specimen of this species was reared from a peach moth larva collected from peach twig at South River on July 17, 1928.

Calliphialtes n. sp. This species was reared from material collected in the early spring at New Brunswick, South River, Glen Moore and Riverton.

Lixophaga plumbea Ald. Three specimens of this dipterous parasite were reared from peach moth larvæ collected from twigs at New Brunswick; two were collected in June and one in August, 1928.

Lixophaga mediocris Ald. One specimen of this parasite was reared from a larva collected from twigs at New Brunswick on June 12, 1928.

Diocetes obliteratus (Cress.). One specimen bred from peach moth larva collected at Lebanon, August 1, 1928.

Syntomosphyrum esurus Riley and *Miotropis clisiocampæ* Ashm. These two pupal parasites were bred from pupæ exposed in the field in July and August, 1928.

Eurytoma sp. near *tylodermatidis* Ashm. This species was reared from material collected in the early spring at New Brunswick, South River and Glen Moore. This species apparently is parasitic on *Glypta* as in every case the specimens collected were in the larvæ or pupal stage and were within a typical *Glypta* cocoon. In several instances cocoons were dissected which contained, besides the *Eurytoma* larva or pupa, the remains of what had been a nearly mature *Glypta*.

Eupelmus amicus Gir. This parasite was obtained from material collected in the early spring at New Brunswick, South River and Glen Moore. Like *Eurytoma*, this species was found in cocoons similar to those characteristic of *Glypta*.